What is claimed is:

## 1. An image processing apparatus, comprising:

radiation image forming means for detecting a radiation amount transmitted through an object and forming a radiation image corresponding to the detected amount;

discriminating means for discriminating at least one of a body part of the object and a radiographing orientation for a radiation image formed by the radiation image forming means;

image processing condition memorizing means for memorizing each of a plurality of image processing conditions corresponding to each of body parts of an object, each of radiographing orientations, or each combination of the body parts and the radiographing orientations;

display means for displaying a single or a plurality of image processing conditions;

image processing condition selecting means for selecting an arbitrary image processing condition from the image processing conditions displayed on the display means; and

image processing means for applying image processing to a radiation image on the basis of the selected image processing condition;

wherein the image processing condition selecting means reads out and displays one or a plurality of image processing conditions on the basis of a discrimination result obtained by the discriminating means and the image processing condition selecting means accepts a selection of an arbitrary image processing condition from the displayed image processing conditions.

- 2. The image processing apparatus as set forth in claim 1, wherein the image processing condition selecting means comprises one or a plurality of image display means, the image processing means applies image processing to the radiation image and produces a processed image for each of the one or plurality of image processing conditions read out from the image processing condition memorizing means on the basis of the discrimination result of the discriminating means, and the image processing condition selecting means displays the processed images on the image display means together with the image processing conditions applied to the processed images respectively.
- 3. The image processing apparatus as set forth in claim 1, wherein the image processing condition selecting means

displays an image process name to specify the image processing condition.

- 4. The image processing apparatus as set forth in claim 3, wherein the image process name is indicated by any one of a radiographed body part of an object, a radiographed body part of an object and a radiographing orientation, and a radiographing method.
- 5. The image processing apparatus as set forth in claim 1, wherein the image processing condition selecting means displays presence/absence information of an image rotation and presence/absence information of image inversion with regard to each of the image processing conditions or the selected image processing condition.
- 6. An image processing apparatus, comprising:

radiation image forming means for detecting a radiation amount transmitted through an object and forming a radiation image corresponding to the detected amount;

discriminating means for discriminating at least one of a body part of an object and a radiographing orientation for the radiation image formed by the radiation image forming means;

image processing condition memorizing means for memorizing each of a plurality of image processing conditions in accordance with each of body parts of an object, each of radiographing orientations, or each combination of both of the body parts and the radiographing orientations;

image processing means for applying an image processing based on an arbitrary image processing condition to the radiation image; and

image selecting means for displaying a single or a plurality of images and being capable of selecting an arbitrary image from the displayed images;

wherein the image processing means reads out one or a plurality of suitable image processing conditions from the image processing condition memorizing means on the basis of a discrimination result by the discriminating means and produces a processed image by applying an image processing to the radiation image for each of one or a plurality of image processing conditions read out, the image display means displays one or a plurality of the processed images simultaneously or one by one by switching so that an arbitrary image can be selected from the displayed processed images.

- 7. The image processing apparatus as set forth in claim 6, wherein the image selecting means indicates the image processing conditions applied to the processed images together with the processed images.
- 8. The image processing apparatus as set forth in claim 6, wherein the image processing condition selecting means displays an image process name to specify an image processing condition.
- The image processing apparatus as set forth in claim 8, wherein the image process name is indicated by any one of a radiographed body part of an object, a radiographed body part of an object and a radiographing orientation and a radiographing method.
- 10. The image processing apparatus as set forth in claim 6, wherein the image processing condition selecting means displays presence/absence information of an image rotation and presence/absence information of image inversion with regard to each of the image processing conditions or the selected image processing condition.

11. A method of selecting image processing in an image processing apparatus provided with radiation image forming means for detecting an amount of radiation transmitted through an object and forming a radiation image corresponding to the detected amount; discriminating means for discriminating at least one of a body part of an object and a radiographing orientation for a radiation image formed by the radiation image forming means; image processing condition memorizing means for memorizing each of a plurality of image processing conditions corresponding to each of body sections of an object, each of radiographing orientations, or each combination of the body sections and the radiographing orientations; display means for displaying a single or a plurality of image processing conditions; image processing condition selecting means for selecting an arbitrary image processing condition out of the image processing conditions displayed on the display means, and image processing means for applying image processing to a radiation image on the basis of the selected image processing condition; the method comprising steps of:

reading one or a plurality of image processing conditions on the basis of a result of discrimination obtained by the discriminating means,

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displaying the image processing conditions read out on the display means, and

accepting a selection of an arbitrary image processing condition from the displayed image processing conditions by the image processing condition selecting means.

12. The method of selecting image processing as set forth in claim 11 in the image processing apparatus further provided with image display means for displaying a radiation image which has been subjected to image processing by image processing means, further comprising steps of:

producing a processed image by applying image processing to the radiation image by the image processing means for one or each of the plurality of image processing conditions read out from the image processing condition memorizing means on the basis of a result of discrimination by the discriminating means, and

displaying the processed images on the image display means together with the image processing conditions applied to the processed images respectively.

13. The method of selecting image processing as set forth in claim 11, wherein an image process name to specify an

image processing condition is displayed in the image processing condition selecting means.

- 14. The method of selecting image processing as set forth in claim 13, wherein the image process name is expressed by a radiographed body part of an object, a radiographed body part of an object and the radiographing orientation, or a radiographing method.
- 15. The method of selecting image processing as set forth in claim 11, wherein presence/absence of an image rotation and presence/absence of image inversion are displayed together with regard to each of the image processing conditions or the selected image processing condition.
- 16. A method of selecting an image in an image processing apparatus provided with radiation image forming means for detecting the radiation amount transmitted through an object and forming a radiation image corresponding to the detected amount; discriminating means for discriminating at least one of a body part of an object and a radiographing orientation for the radiation image formed by the radiation image forming means;

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image processing condition memorizing means for memorizing each of a plurality of image processing conditions corresponding to each of body sections of an object, each of radiographing orientations, or each combination of the body sections and the radiographing orientations; image processing means for applying image processing based on an arbitrary image processing condition to the radiation image; and image selecting means displaying a single or a plurality of images and being capable of selecting an arbitrary image out of the displayed images;

the method comprises steps of:

reading out one or a plurality of suitable image processing conditions from the image processing condition memorizing means on the basis of the result of discrimination obtained by the discriminating means;

producing a processed image by applying image processing to the radiation image by the image processing means for each the image processing conditions read out;

displaying the processed image by one or plural numbers simultaneously or one by one by switching; and

selecting an arbitrary image out of the displayed processed images.

- 17. The method of selecting an image as set forth in claim 16, wherein the image processing conditions which have been applied to the processed images are displayed together with the processed images in the image selecting means.
- 18. The method of selecting an image as set forth in claim 16, wherein a image process name to specify the image processing is displayed in the image processing condition selecting means.
- 19. The method of selecting image processing as set forth in claim 18, wherein the image process name is expressed by a radiographed body part of an object, a radiographed body part of an object and the radiographing orientation, or a radiographing method.
- 20. The method of selecting image processing as set forth in claim 16, wherein presence/absence of an image rotation and presence/absence of image inversion are displayed together with regard to each of the image processing conditions or the selected image processing condition.